

CLAIMS

What is claimed is:

- 1 1. A method of building a web site, the method comprising the steps of:
2 creating a first data structure holding data indicating a first arrangement of
3 components, the first arrangement associated with a first type of web site;
4 presenting a user with a series of one or more user interfaces including controls for
5 modifying the first arrangement of components;
6 receiving input from the user in response to user interaction with the controls on
7 the series of one or more interfaces; and
8 in response to the input from the user, automatically performing the steps of
9 creating a user site data structure holding data indicating a modified
10 arrangement of components based on the input from the user, and
11 building the web site based on the data in the user site data structure.
- 1 2. The method of claim 1, said step of building the web site further comprising
2 translating data in the user site data structure to commands to cause:
3 creation, within a database system, of database objects for forming one or more
4 web site pages according to the modified arrangement; and
5 execution of a routine to form one of the web site pages based on the database
6 structures in response to receiving a request for the page.
- 1 3. The method of claim 2, said step of building the web site further comprising
2 translating data in the user site data structure to commands to cause creation of the
3 database, before causing creation of the database objects.
- 1 4. The method of claim 1, wherein the first data structure is an extensible markup
2 language (XML) document.

1 5. The method of claim 4, wherein
 2 the method further comprises the step of creating an extensible stylesheet language
 3 transformation (XSLT) document for forming a document displayable by a
 4 web browser process operated by the user; and
 5 said step of presenting the user with a series of one or more user interfaces further
 6 comprises forming the document displayable by the web browser based on
 7 the first data structure and the XSLT document.

1 6. The method of claim 5, wherein the document displayable by the web browser is
 2 an hypertext markup language (HTML) document.

1 7. The method of claim 1, wherein the user site data structure is an extensible markup
 2 language (XML) document.

1 8. The method of claim 4, wherein the user site data structure is an XML document.

1 9. The method of claim 8, wherein XML element types used in the first data structure
 2 and XML element types used in the user site data structure are defined in a shared
 3 document type definition (DTD) document.

1 10. The method of claim 1, wherein a particular component included in the first
 2 arrangement of components is generated at a second web site.

1 11. The method of claim 10, wherein:
 2 the modified arrangement of components includes the particular component, and
 3 the web site includes a link to the second web site for generating the particular
 4 component.

1 12. The method of claim 11, further comprising the step of:
2 creating a plurality of component data structures, each component data structure
3 holding data indicating one or more properties of a component for the first
4 arrangement of components,
5 wherein
6 the first data structure includes one or more references to one or more
7 component data structures of the plurality of component data
8 structures, and
9 the user site data structure includes one or more references to one or more
10 component data structures of the plurality of component data
11 structures.

1 13. The method of claim 1, further comprising the step of:
2 creating a second data structure holding data indicating a second arrangement of
3 components, the second arrangement associated with a second type of web
4 site;
5 wherein the series of one or more user interfaces further include controls for
6 selecting one of the first arrangement of components and the second
7 arrangement of components.

1 14. A method of building a web site, the method comprising the steps of:
 2 creating a first data structure holding data indicating one or more adjustable
 3 properties of a component for a page for the web site;
 4 presenting a user with a series of one or more user interfaces including controls for
 5 determining one or more values corresponding to the one or more
 6 adjustable properties;
 7 receiving user input indicating the one or more values in response to user
 8 interaction with the controls on the series of one or more interfaces; and
 9 in response to the user input, automatically performing the step of building the
 10 component in the web site based on the one or more values.

1 15. The method of claim 14, said step of building the component in the web site further
 2 comprising creating a second data structure holding data indicating the one or more values
 3 for the one or more adjustable properties of the component based on the user input.

1 16. The method of claim 14, said step of building the component in the web site further
 2 comprising translating data in the second data structure to commands to cause creation,
 3 within a database system, of one or more database objects to support the component:

1 17. The method of claim 16, said step of building the component in the web site further
 2 comprising translating data in the second data structure to commands to cause creation of
 3 the database, before causing creation of the one or more database objects.

1 18. The method of claim 14, wherein the first data structure is an extensible markup
 2 language (XML) document.

- 1 19. The method of claim 18, wherein
2 the method further comprises the step of creating an extensible stylesheet language
3 transformation (XSLT) document for forming a document displayable by a
4 web browser process operated by the user; and
5 said step of presenting the user with a series of one or more user interfaces further
6 comprises forming the document displayable by the web browser based on
7 the first data structure and the XSLT document.
- 1 20. The method of claim 19, wherein the document displayable by the web browser is
2 an hypertext markup language (HTML) document.
- 1 21. The method of claim 15, wherein the second data structure is an extensible markup
2 language (XML) document.
- 1 22. The method of claim 18, wherein XML element types used in the first data
2 structure are defined in a first document type definition (DTD) document.
- 1 23. The method of claim 22, wherein:
2 the method further comprises the step of distributing a copy of the first DTD
3 document to a supplier of a component for web pages; and
4 said step of creating the first data structure further comprises
5 receiving a supplier XML document from the supplier including XML
6 element types defined in the first DTD, and
7 generating the data indicating one or more adjustable properties based on
8 supplier data in the supplier XML document.
- 1 24. The method of claim 14, wherein the component is generated at a second web site.

1 25. The method of claim 24, wherein:
2 the step of building the component in the web site comprises including a link to the
3 second web site in the web site, and
4 the link includes data indicating the one or more values corresponding to the one
5 or more adjustable parameters.

1 26. A computer-readable medium for building a web site, the medium carrying:
2 a first data structure holding data indicating a first arrangement of components, the
3 first arrangement associated with a first type of web site; and
4 one or more sequences of instructions wherein execution of the one or more
5 sequences of instructions by one or more processors causes the one or more
6 processors to perform the steps of
7 presenting a user with a series of one or more user interfaces including
8 controls for modifying the first arrangement of components,
9 receiving input from the user in response to user interaction with the
10 controls on the series of one or more interfaces, and
11 in response to the input from the user, automatically performing the steps
12 of
13 creating a user site data structure holding data indicating a modified
14 arrangement of components based on the input from the
15 user, and
16 building the web site based on the data in the user site data
17 structure.

1 27. The computer-readable medium of claim 26, said step of building the web site
 2 further comprising translating data in the user site data structure to commands to cause:
 3 creation, within a database system, of database objects for forming one or more
 4 web site pages according to the modified arrangement; and
 5 execution of a routine to form one of the web site pages based on the database
 6 structures in response to receiving a request for the page.

1 28. The computer-readable medium of claim 27, said step of building the web site
 2 further comprising translating data in the user site data structure to commands to cause
 3 creation of the database, before causing creation of the database objects.

1 29. The computer-readable medium of claim 26, wherein the first data structure is an
 2 extensible markup language (XML) document.

1 30. The computer-readable medium of claim 29, wherein:
 2 the computer-readable medium further carries an extensible stylesheet language
 3 transformation (XSLT) document for forming a document displayable by a
 4 web browser process operated by the user; and
 5 said step of presenting the user with a series of one or more user interfaces further
 6 comprises forming the document displayable by the web browser process
 7 based on the first data structure and the XSLT document.

1 31. The computer-readable medium of claim 30, wherein the document displayable by
 2 the web browser is an hypertext markup language (HTML) document.

1 32. The computer-readable medium of claim 26, wherein the user site data structure is
 2 an extensible markup language (XML) document.

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1 33. The computer-readable medium of claim 29, wherein the user site data structure is
2 an XML document.

1 34. The computer-readable medium of claim 33, wherein XML element types used in
2 the first data structure and XML element types used in the user site data structure are
3 defined in a shared document type definition (DTD) document.

1 35. The computer-readable medium of claim 26, wherein a particular component
2 included in the first arrangement of components is generated at a second web site.

1 36. The computer-readable medium of claim 35, wherein:
2 the modified arrangement of components includes the particular component, and
3 the web site includes a link to the second web site for generating the particular
4 component.

1 37. The computer-readable medium of claim 36, wherein:
2 the computer-readable medium further holds a plurality of component data
3 structures, each component data structure holding data indicating one or
4 more properties of a component for the first arrangement of components,
5 the first data structure includes one or more references to one or more component
6 data structures of the plurality of component data structures, and
7 the user site data structure includes one or more references to one or more
8 component data structures of the plurality of component data structures.

1 38. The computer-readable medium of claim 26, wherein:
2 the computer-readable medium further carries a second data structure holding data
3 indicating a second arrangement of components, the second arrangement
4 associated with a second type of web site; and
5 the series of one or more user interfaces further include controls for selecting one
6 of the first arrangement of components and the second arrangement of
7 components.

1 39. A computer-readable medium for building a web site, the medium carrying:
2 a first data structure holding data indicating one or more adjustable properties of a
3 component for a page for the web site; and
4 one or more sequences of instructions wherein execution of the one or more
5 sequences of instructions by one or more processors causes the one or more
6 processors to perform the steps of
7 presenting a user with a series of one or more user interfaces including
8 controls for determining one or more values corresponding to the
9 one or more adjustable properties,
10 receiving user input indicating the one or more values in response to user
11 interaction with the controls on the series of one or more interfaces,
12 and
13 in response to the user input, automatically performing the step of building
14 the component in the web site based on the one or more values.

1 40. The computer-readable medium of claim 39, said step of building the component
2 in the web site further comprising creating a second data structure holding data indicating
3 the one or more values for the one or more adjustable properties of the component based
4 on the user input.

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1 41. The computer-readable medium of claim 39, said step of building the component
2 in the web site further comprising translating data in the second data structure to
3 commands to cause creation, within a database system, of one or more database objects to
4 support the component:

1 42. The computer-readable medium of claim 41, said step of building the component
2 in the web site further comprising translating data in the second data structure to
3 commands to cause creation of the database, before causing creation of the one or more
4 database objects.

1 43. The computer-readable medium of claim 39, wherein the first data structure is an
2 extensible markup language (XML) document.

1 44. The computer-readable medium of claim 43, wherein
2 the computer-readable medium further carries an extensible stylesheet language
3 transformation (XSLT) document for forming a document displayable by a
4 web browser process operated by the user; and
5 said step of presenting the user with a series of one or more user interfaces further
6 comprises forming the document displayable by the web browser based on
7 the first data structure and the XSLT document.

1 45. The computer-readable medium of claim 44, wherein the document displayable by
2 the web browser is an hypertext markup language (HTML) document.

1 46. The computer-readable medium of claim 40, wherein the second data structure is
2 an extensible markup language (XML) document.

47. The computer-readable medium of claim 43, wherein XML element types used in the first data structure are defined in a first document type definition (DTD) document.

48. The computer-readable medium of claim 47, the one or more sequences of instructions further causing the one or more processors to perform the steps of:

- distributing a copy of the first DTD document to a supplier of a component for web pages;
- receiving a supplier XML document from the supplier including XML element types defined in the first DTD; and
- generating the data indicating one or more adjustable properties based on supplier data in the supplier XML document.

49. The computer-readable medium of claim 39, wherein the component is generated at a second web site.

50. The computer-readable medium of claim 49, wherein:
the step of building the component in the web site comprises including a link to the
second web site in the web site, and
the link includes data indicating the one or more values corresponding to the one
or more adjustable parameters.

51. A web site building appliance for building a web site, the appliance comprising:
a processor;
a computer readable medium carrying a web site wizard including
a template holding data indicating a first arrangement of components, the
first arrangement associated with a first type of web site,
instructions to configure the processor for

7 presenting a user with a series of one or more user interfaces
8 including controls for modifying the first arrangement of
9 components,
10 receiving input from the user in response to user interaction with the
11 controls on the series of one or more interfaces indicating a
12 modified arrangement, and
13 in response to the input from the user, automatically building the
14 web site based on the modified arrangement; and
15 a special purpose operating system whose features and configuration are dictated
16 by the web site wizard and supporting program components.

1 52. The appliance of claim 51, the instructions further configuring the processor to call
2 a separate database appliance on a local appliance network during the step of creating a
3 database.

1 53. The appliance of claim 51, the instructions further configuring the processor to
2 send a request to a separate web site server appliance on a local appliance network during
3 the step of building a web site.